

1. In a data processing system including first and second storage devices and a host device for generating commands during the processing of a host application including a command for initiating the copying of data from storage locations in the first storage device, as a source storage device, to storage locations in the a second storage device as a destination storage device, a method responding to the command by copying data the storage locations in the source storage device to storage locations in the destination storage device, said method comprising the steps in sequence of:

- A) establishing an operating environment by identifying storage locations in the source storage device and storage locations in the destination storage device,
- B) making the identified storage locations in the source and destination storage devices available for use by host applications, and
- C) copying the data from the storage locations in the source storage device to locations in the destination storage device in an ordered manner including, for each storage location in the source storage device:
  - i) copying the data from the storage location in the source storage device to the corresponding

storage location in the destination storage device, and

- ii) updating the information in the operating environment to indicate that the data has been transferred from the source storage device.

2. A method as recited in claim 1 additionally comprising the step of deleting the operating environment after said copying has been completed.

3. A method as recited in claim 2 wherein a host application generates as another command a write request to transfer data from the host application to an identified storage location in the source storage device during said ordered copying, said method including the steps of:

- i) interrupting said ordered copying in response to the write request,
- ii) copying data from the storage location in the source storage device to the corresponding storage location in the destination storage device,
- iii) re-enabling said ordered copying upon completion of said data copying, and

- iv) completing the data transfer to the identified storage location in the source storage device in response to the write request.

5 4. A method as recited in claim 2 wherein a host application  
generates as another command one of read and write  
requests to transfer data between the host application and  
an identified storage location in the destination storage  
device during said ordered copying, said method including  
0 the steps of:

- i) interrupting said ordered copying in response to the request,
- ii) copying data to the identified storage location in the destination storage device from the corresponding storage location in the source storage device,
- iii) re-enabling said ordered copying upon completion of said data copying, and
- iv) completing the transfer between the host application and the identified storage location in the destination storage device.

5. A data storage facility that connects to a host device that generates commands during the processing of host applications wherein said data storage facility is adapted for copying data from a set of source storage locations in first disk storage device to a set of corresponding destination storage locations in a second disk storage device in response to a predetermined command from a host application identifying the source and destination storage locations, said facility comprising:

- A) means responsive to the predetermined command for establishing an operating environment by identifying source and destination storage locations,
- B) means for enabling interaction of commands with the all of said source and storage locations and the host applications, and
- C) means for copying the data from said source storage locations to corresponding destination storage locations in an ordered manner, and
- D) means responsive to said copying means for updating the operating environment to indicate data that has been transferred by said copying means.

6. A data storage facility as recited in claim 5 additionally comprising the step of deleting the operating environment after said copying has been completed.
7. A data storage facility as recited in claim 6 wherein a host application generates as one command a write request to transfer data from the host application to an identified source storage location during said ordered copying, said copying means including:
  - i) a copy program,
  - ii) means for operating said copy program in an ordered copying mode,
  - iii) means for interrupting said ordered copying operating means in response to a write request and enabling said copy program to copy data from said identified source storage location to a corresponding destination source location,
  - iv) means for re-enabling said ordered copying upon completion of said data copying, and
  - v) means for completing the data transfer to said identified source storage location in response to the write request.

8. A data storage facility as recited in claim 6 wherein a host application generates as one command one of read and write requests to transfer data between the host application and an identified destination storage location during the operation of said ordered copying means, said ordered copying means including:

- i) a copy program,
- ii) means for operating said copy program in an ordered copying mode,
- iii) means for interrupting said ordered copying in response to any read and write request to said identified destination source location thereby to enable said copy program to copy data from a corresponding source storage location,
- iv) means for re-enabling said ordered copying upon completion of said data copying, and
- v) means for completing the transfer between the host application and the identified destination storage location.